equipped with a suitable means to retain the unit in position on the face. Flight crew masks for supplemental oxygen must have provisions for the use of communication equipment.

- (b) If certification for operation up to and including 25,000 feet is requested, an oxygen supply terminal and unit of oxygen dispensing equipment for the immediate use of oxygen by each crewmember must be within easy reach of that crewmember. For any other occupants, the supply terminals and dispensing equipment must be located to allow the use of oxygen as required by the operating rules in this chapter.
- (c) If certification for operation above 25,000 feet is requested, there must be oxygen dispensing equipment meeting the following requirements:
- (1) There must be an oxygen dispensing unit connected to oxygen supply terminals immediately available to each occupant, wherever seated, and at least two oxygen dispensing units connected to oxygen terminals in each lavatory. The total number of dispensing units and outlets in the cabin must exceed the number of seats by at least 10 percent. The extra units must be as uniformly distributed throughout the cabin as practicable. If certification for operation above 30,000 feet is requested, the dispensing units providing the required oxygen flow must be automatically presented to the occupants before the cabin pressure altitude exceeds 15.000 feet. The crew must be provided with a manual means of making the dispensing units immediately available in the event of failure of the automatic system.
- (2) Each flight crewmember on flight deck duty must be provided with a quick-donning type oxygen dispensing unit connected to an oxygen supply terminal. This dispensing unit must be immediately available to the flight crewmember when seated at his station, and installed so that it:
- (i) Can be placed on the face from its ready position, properly secured, sealed, and supplying oxygen upon demand, with one hand, within five seconds and without disturbing eyeglasses or causing delay in proceeding with emergency duties; and

- (ii) Allows, while in place, the performance of normal communication functions.
- (3) The oxygen dispensing equipment for the flight crewmembers must be:
- (i) The diluter demand or pressure demand (pressure demand mask with a diluter demand pressure breathing regulator) type, or other approved oxygen equipment shown to provide the same degree of protection, for airplanes to be operated above 25,000 feet.
- (ii) The pressure demand (pressure demand mask with a diluter demand pressure breathing regulator) type with mask-mounted regulator, or other approved oxygen equipment shown to provide the same degree of protection, for airplanes operated at altitudes where decompressions that are not extremely improbable may expose the flightcrew to cabin pressure altitudes in excess of 34,000 feet.
- (4) Portable oxygen equipment must be immediately available for each cabin attendant.

[Doc. No. 5066, 29 FR 18291, Dec. 24, 1964, as amended by Amdt. 25–41, 42 FR 36971, July 18, 1977; Amdt. 25–87, 61 FR 28696, June 5, 1996]

§ 25.1449 Means for determining use of oxygen.

There must be a means to allow the crew to determine whether oxygen is being delivered to the dispensing equipment.

§25.1450 Chemical oxygen generators.

- (a) For the purpose of this section, a chemical oxygen generator is defined as a device which produces oxygen by chemical reaction.
- (b) Each chemical oxygen generator must be designed and installed in accordance with the following requirements:
- (1) Surface temperature developed by the generator during operation may not create a hazard to the airplane or to its occupants.
- (2) Means must be provided to relieve any internal pressure that may be hazardous.
- (c) In addition to meeting the requirements in paragraph (b) of this section, each portable chemical oxygen generator that is capable of sustained operation by successive replacement of